

In re Patent Application of
HEELEY ET AL.
Serial No. 10/521,039
Filed: NOVEMBER 14, 2005

REMARKS

Applicants thank the Examiner for the careful and thorough examination of the present application, for correctly withdrawing the prior rejection in view of the previous response, and for the indication of allowable subject matter. By this amendment, Claim 28 is amended to eliminate an alleged informality. Claims 16-36 remain pending in the application. Favorable reconsideration is respectfully requested.

I. The Claimed Invention

The invention as set forth in independent Claim 16 is directed to a locking mechanism for a latch mechanism having a latch spindle turnable to move a latch bolt from its latching position. The locking mechanism includes a rotatable handle having a drive passageway therein for fitting to an adjacent end of the latch spindle, a locking member mounted on the handle, and a retainer associated and engageable with the locking member to lock the handle against rotation. The drive passageway is configured to allow the handle to turn relatively to the latch spindle in opposite directions through a predetermined angle of movement, at one end of which, the handle is engageable with the latch spindle for turning the latch spindle in an opening direction to move the latch bolt from its latching position and, at the opposite end of which, the handle is in a locking position in which the locking member is engageable with the retainer and the handle is engageable with the spindle to prohibit turning of the spindle in the opening direction.

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The invention as set forth in independent Claim 29 is directed to a latch mechanism including a latch spindle, a latch bolt movable from a latching position to a release position in response to turning of the latch spindle, and a locking mechanism comprising a rotatable handle having a drive passageway therein fitted to an adjacent end of the latch spindle, a locking member mounted on the handle, and a retainer associated and engageable with the locking member to lock the handle against rotation. The drive passageway is configured to allow the handle to turn relatively to the latch spindle in opposite directions through a predetermined angle of movement, at one end of which, the handle is engageable with the latch spindle for turning the latch spindle in an opening direction to move the latch bolt from its latching position and, at the opposite end of which, the handle is in a locking position in which the locking member is engageable with the retainer and the handle is engageable with the spindle to prohibit turning of the spindle in the opening direction.

The invention as set forth in independent Claim 34 is directed to a locking mechanism for a latch mechanism having a latch spindle turnable to move a latch bolt from a latching position. The locking mechanism includes a rotatable handle for fixing to an adjacent end of the latch spindle for turning the latch spindle, a locking member mounted on the handle, and a retainer associated and engageable with the locking member, in a locking position of the handle, to prohibit turning of the handle and the latch spindle. A guide is spaced from the locking position and delimits an arc of

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movement of the locking member when the handle is turned from a rest position to move the latch bolt from its latching position. An actuator is for operating the locking member to permit the handle to be turned from the rest position to the locking position and the locking member to be engageable with the retainer.

II. The Claims are Patentable

Claims 16-22, 24, 25 and 27-36 were rejected in view of Hensley et al. for the reasons set forth on pages 2-6 of the Office Action. Claims 23 and 26 were indicated as being directed to allowable subject matter. Applicants contend that Claims 16-22, 24, 25 and 27-36 clearly define over the cited reference, and in view of the following remarks, favorable reconsideration of the rejections under 35 U.S.C. §102(b) and §103(a) is requested.

A. The Rejection of Independent Claims 16, 29 and 34 under 35 U.S.C. §102

Henlsey et al. is directed to a door lock having a latch bolt selectively retractable by a rotatable driver spindle, the driver spindle being rotatable by operation of an outside manual lever associated with an outside chassis assembly or by operation of an inside manual lever associated with an inside chassis assembly. A lost motion mechanism is provided between the driver spindle and the inside chassis assembly so that rotational movement of the driver spindle is not transmitted to the inside lever. An interconnect mechanism connects the inside lever to a deadbolt operating assembly

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whereby operation of the inside lever retracts both the latch bolt and the deadbolt. The lost motion mechanism includes a driven spindle located within an axially extending bore in a spindle core and having an opening for receiving an end of the driver spindle, the spindle core being mechanically linked to the inside lever. The driven spindle and core are configured such that rotational movement of the spindle core is transmitted to the driver spindle but rotational movement of the driver spindle and driven spindle is not transmitted to the spindle core. The interconnect mechanism includes a lower cam driven by the spindle core for moving a slide plate, and an upper cam mounted on an operating bar which is rotated to retract or extend the deadbolt. As the lower cam is rotated, it moves the slide plate which is configured to receive and rotate the upper cam so that the operating bar retracts the deadbolt.

Although the Henlsey et al. mechanism includes a rotatable handle with a drive passageway fitted to a latch spindle, the Examiner again has mischaracterized various portions of the mechanism in an attempt to meet the claimed features of the locking member, retainer and the configuration of the drive passageway. There are no details provided of the passageway in the handle of the Henlsey et al. mechanism that prevent the handle from turning relatively to the latch spindle in opposite directions through a predetermined angle of movement at one end of which the handle is in a horizontal rest position and is engageable with the latch spindle for turning the spindle in a direction to withdraw the latch bolt from its latching position, and at the opposite end, the

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handle is in a lifted locking position and is engageable with the spindle to prohibit turning thereof in the opening direction, as claimed.

More specifically, in Hensley et al. the door lock has a latch bolt 13 selectively retractable, via a rotatable driver spindle 76, by outside and inside handles 72, 104. As best seen in Fig. 4 of Hensley et al, a lost motion mechanism is provided between the driver spindle and the inside handle 104 so that when the driver spindle is rotated by the outside handle 72, the inside handle 104 does not turn (see Hensley et al., col. 6, lines 36-40). The lost motion mechanism includes a driven spindle 110 having a square section opening for engaging the driver spindle 76 and located within the axially extending bore of a spindle core 112. The spindle core is linked for rotation with an outer spindle 118 by a projection 112a engaged with a slot 120 in the outer spindle and the latter is, itself, secured within an axially extending passageway 132 within the boss of the handle 104. The handle 104 is fixed to the outer spindle by a rib 104a also engaged in the slot 120 of the spindle 118 and by staking (col.5, line 1-8).

Insofar as the outer spindle 118 and the core 112 are fixed to the handle 104, the axial opening 134 in the spindle core 112 may be equated to the drive passageway of Applicants claimed rotatable handle. The spindle core has diametrically opposed arcuate ribs 136 projecting into the passageway 134 and having end surfaces forming pairs of abutments 138. The driven spindle 110 has diametrically

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opposite projections 142 for driving engagement with the abutments 138.

Referring to Fig. 4 of Hensley et al., and col. 5, line 67 to col. 6, line 11, when the outside handle is turned clockwise, the driver spindle 76 is driven clockwise (i.e. anticlockwise as viewed in Fig. 4) from the initial position illustrated in Figure 4. As the driver spindle 76 rotates, it also drives the driven spindle 110 but the spindle core is not driven. At about the time the projections 142 on the driven spindle 110 reach the abutments 138 at the opposite end of their paths of movement, the rotation stops 88 on the outside chassis assembly limit further rotation of the outside handle lever 72 and driver 76, and not the abutments 138 of the passageway 134. The rotation stops 88 control the movement of the handle 72 (col. 3, lines 64-66; col. 4, lines 5-10) and not the spindle core and its associated abutments 138.

When the inside handle is rotated, it turns the outer spindle 118 and the ribs 142 on the driven spindle 110 are engaged with the abutments 138 so that, as the outer spindle and spindle core rotate, they cause rotation of the driven spindle 110 and the driver spindle 76 to retract the latchbolt 13 (col. 6, lines 18-25). Hence, the drive passageway of Hensley et al., is designed simply to provide lost motion between the spindle core 112 and driver spindle 110 so that turning of the outside handle to rotate the driver spindle 76 is not transmitted to the inside handle. Consequently, the driven spindle 110 does not constitute a locking member mounted on the handle, as alleged by the Examiner, and the spindle core 112 is not a retainer which is

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engagable with the driven spindle 110 to lock the inside handle against rotation. The spindle core 112 is fixed to the inside handle 104 and merely serves to rotate the driver spindle when this handle is turned.

Nor is there any disclosure in Hensley et al., of details of a configuration of the drive passageway 134 which would allow the inside handle 104 to turn relatively to the latch spindle 76/110 in opposite directions through a predetermined angle of movement, at one end of which the handle 104 is engagable with the latch spindle for turning it in an opening direction to retract the latch bolt and, at the opposite end of which, the handle is in a locking position in which the locking member is engagable with the retainer and the handle is engagable with the latch spindle to prohibit turning of the spindle in the opening direction. These features of claim 16 are therefore not disclosed by Hensley et al., and it is submitted that the reference cannot therefore meet the features of Claim 16.

For at least the reasons set forth above, independent Claim 29 which is directed to a latch mechanism comprising the locking mechanism of Claim 16 is also not anticipated by Hensley et al.

Regarding independent Claim 34, there is no disclosure in Hensley et al. of a locking member mounted on the inside handle 104 and a retainer associated and engagable with the locking member, in a locking position of the handle, to prohibit turning of the handle 104 and the latch spindle 76/110. Furthermore, Hensley et al. does not disclose a guide spaced from a locking position and delimiting an arc of

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movement of a locking member when the handle 104 is turned from a rest position to move the latch bolt 13 from its latching position, nor an actuator for operating a locking member to permit the handle to be turned from the rest position to the locking position and the locking member to be engagable with the retainer.

As the Examiner is aware, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as is contained in the claim. In view of the discussion above, it should be apparent that Hensley et al. does not disclose each of the claimed features as set forth in independent Claims 16, 29 and 34.

Thus, it is submitted that the independent claims are patentable over the prior art. In view of the patentability of the independent claims, it is submitted that their dependent claims, which recite yet further distinguishing features are also patentable over the cited references for at least the reasons set forth above.

B. The Rejection of Claims 25, 27 and 28 under 35 U.S.C. §103

Secondly, with respect to dependent Claims 25, 27 and 28, Applicants maintain that the Examiner is impermissibly using the teachings of Applicants' own patent application as a roadmap to modify the prior art. For example, on page 5 of the Office Action, the Examiner asserts that it "would have been an obvious matter of design choice to make the different portions of the device of whatever form or shape was desired

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or expedient." But a careful review of dependent Claims 25, 27 and 28 reveals more than merely features related to "form or shape" being claimed.

More specifically, Claim 25 sets forth that the drive passageway in the handle is axially fluted and includes an internal cross-section comprising ribs and grooves symmetrically spaced about the internal periphery of the passageway and arranged to allow the handle to have a predetermined degree of rotational freedom relative to the latch spindle when engaged therewith. This is not a mere recitation of a "flute and rib" as asserted by the Examiner, and thus cannot be considered to be a design choice of form or shape as relied upon by the Examiner in his Official Notice rationale.

Furthermore, Claim 28 recites that the latch spindle comprises a two-part latch spindle, both parts of which are of square section with one of the parts being axially rotated with respect to the other part to accommodate a change in relative positions with the drive passageway. Again, this cannot be considered to be a design choice of form or shape as relied upon by the Examiner.

As the Examiner is aware, to establish a *prima facie* case of obviousness the prior art reference must teach or suggest all the claim features. The initial burden is on the Examiner to provide some suggestion of the desirability of doing what the Applicants have done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the reference must expressly or impliedly suggest the claimed invention or the Examiner must present a

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convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the reference and/or the general knowledge in the art. The Examiner's basis to make the claimed combination should not be founded in Applicants' disclosure.

The Examiner has not provided any teaching or suggestion in the cited reference or any other basis to provide the combination of features as claimed. Accordingly, for at least the reasons given above, Applicants maintain that the cited reference does not disclose or fairly suggest the invention as claimed. Furthermore, no proper modification of the teachings of this reference could result in the invention as claimed. Thus, the rejection under 35 U.S.C. §103(a) should be withdrawn.

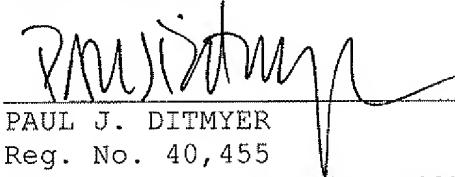
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III. Conclusion

In view of the foregoing remarks, it is respectfully submitted that the present application is in condition for allowance. An early notice thereof is earnestly solicited. If, after reviewing this Response, there are any remaining informalities which need to be resolved before the application can be passed to issue, the Examiner is invited and respectfully requested to contact the undersigned by telephone in order to resolve such informalities.

Respectfully submitted,



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